

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A method for creating a file information database comprising:
 - scanning a storage server having a directory structure;
 - collecting data regarding the directory structure;
 - for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;
 - using a first thread to assign assigning a first identification (ID) number to a first determined directory and a second ID number to a second determined directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;
 - using a second thread to examine the determined files; and
 - writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.
2. (Original): The method of claim 1, wherein scanning and collecting comprise scanning and collecting by using an agent separate from the storage server.
3. (Original): The method of claim 2, wherein the agent has a first file system, and the storage server has a second file system, and wherein the first file system is different from the second file system.
4. (previously presented): The method of claim 1, wherein the relation indicates that the first directory is an immediate child of the second directory.
5. (Original): The method of claim 1, wherein assigning further comprises assigning the ID numbers while collecting the data.

6. (Original): The method of claim 1, wherein writing the data structure further comprises writing the data structure to a database server.
7. (previously presented): The method of claim 4, further comprising:
receiving a request to determine the parent of the first directory; and
referencing the relation between the first directory and the second directory of the data structure to determine the parent of the first directory.
8. (previously presented): The method of claim 4, further comprising:
receiving a request to determine an immediate child of the second directory;
searching the data structure to find any relation, including the relation between the first directory and the second directory, which indicates that the second directory is a parent in said relation; and
determining the immediate child of the second directory based on said any relation.
9. (previously presented): The method of claim 4, further comprising:
receiving a request to determine a set of ID numbers of every child of a third directory in the directory structure, wherein the third directory is assigned a third ID number;
determining a fourth ID number of a sibling of the third directory; and
determining the set of ID numbers between the third ID number and the fourth ID number.

10. (Currently Amended): A machine readable medium having stored thereon executable program code which, when executed, causes a machine to perform a method for creating a file information database, the method comprising:

scanning a storage server having a directory structure;

collecting data regarding the directory structure;

for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;

using a first thread to assign ~~assigning~~ a first identification (ID) number to a first ~~determined~~ directory and a second ID number to a second ~~determined~~ directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;

using a second thread to examine the determined files; and

writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.

11. (Original): The machine readable medium of claim 10, wherein scanning and collecting comprise scanning and collecting using an agent separate from the storage server.

12. (Original): The machine readable medium of claim 11, wherein the agent has a first file system, and the storage server has a second file system, and wherein the first file system is different from the second file system.

13. (previously presented): The machine readable medium of claim 10, wherein the relation indicates that the first directory is an immediate child of the second directory.

14. (Original): The machine readable medium of claim 10, wherein assigning further comprises assigning the ID numbers while collecting the data.

15. (Original): The machine readable medium of claim 10, wherein writing the data structure further comprises writing the data structure to a database server.

16. (previously presented): The machine readable medium of claim 13, further comprising:

- receiving a request to determine the parent of the first directory; and
- referencing the relation between the first directory and the second directory of the data structure to determine the parent of the first directory.

17. (previously presented): The machine readable medium of claim 13, further comprising:

- receiving a request to determine an immediate child of the second directory;
- searching the data structure to find any relation, including the relation between the first directory and the second directory, which indicates that the second directory is a parent in said relation; and
- determining the immediate child of the second directory based on said any relation.

18. (previously presented): The machine readable medium of claim 13, further comprising:

- receiving a request to determine a set of ID numbers of every child of a third directory in the directory structure, wherein the third directory is assigned a third ID number;
- determining a fourth ID number of a sibling of the third directory; and
- determining the set of ID numbers between the third ID number and the fourth ID number.

19-27. (Canceled).

28. (Currently Amended): A method for creating a logical tree comprising:
 using a directory walking thread to examine ~~examining~~ a first directory from a top of a directory queue, and determine ~~determining~~ a set of children of the directory;
 assigning [an] a depth first search (DFS) ID to the first directory, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;
 examining a set of children of the first directory ~~and determining to determine~~ a first subset of files and a second subset of directories
 placing the first subset of files in a file queue for examination by a file thread;
and
 placing the second subset on the top of the directory queue.

29-31. (Canceled)

32. (Currently Amended): The method of claim 31, wherein examining the file queue further comprises recording [an] information about a first file taken from the file queue.

33. (Canceled)

34. (Currently Amended): The method of claim [33]31, wherein the directory walking thread is hosted by an [the] agent that is separate from the storage server.

35. (Currently Amended): The method of claim 34, further comprising using an MMA to control the agent.

36. (Currently Amended): The method of claim [33]34, wherein the directories are hosted by storage server is a filer.

37. (Canceled).

38. (Canceled).

39. (New): A method for creating a file information database comprising:

- scanning a storage server having a directory structure;
- for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;
- using a first thread to assign a first identification (ID) number to a first determined directory and a second ID number to a second determined directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are chronologically assigned in numerical order while the directory structure is being traversed in the DFS order;
- using a second thread to examine the determined files; and
- writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.

40. (New): The method of claim 1, wherein a top level directory of the directory structure is assigned an ID of "0" (zero).